

Resolution

The NTSC 4:3 picture can be compared with the 1125 4:3 picture. Similarly a wide screen NTSC picture could be compared with the 1125 5:3 or 16:9 picture (assuming appropriate NTSC receivers and programming are available).

Program Content

A variety of program content should be considered, but may have to be limited because of availability. The following programming material is known to exist and could probably be made available upon request.

1. **Commercial advertisements.** A number of commercials have been produced by Rebo Studios in HDTV for the Reebok Corporation and a perfume manufacturer. There are probably several others which might be available.
2. **Sports.** WTTW's production "Playing in Chicago" includes footage from a major league baseball game. PBS could obtain this material.
3. **Action/adventure.** CBS produced a side-by-side program segment from the WISEGUY series and also produced the "made for television" movie "The Littlest Victim" using HDTV equipment. Several Hollywood studios have converted films to HDTV. The known features include "Top Gun" and "Lawrence of Arabia." Excerpts from these films could probably be made available.
4. **News.** Group W has volunteered to do a parallel news shot using HDTV equipment if we can gain access to a HDTV camera and recorder.
5. **Children's.** Unknown. PBS could request WNET or WQED to allow a few short side-by-side HDTV shots of Mister Rogers or Sesame Street.
6. **Drama/cultural.** WTTW's Playing Chicago includes some art museum shots.

Lighting

Since both dim and normal lighting impacts viewer satisfaction and varies positively/negatively by screen size, two lighting settings will be incorporated as key variables. (HDTV screen brightness capability is improving fairly rapidly.)

With regard to the remaining key variables, refinements in key criteria from Phase I will be addressed in addition to the open items listed under Phase II as the necessary equipment becomes available.

Vendor Responses to RFP

Eight firms responded to the RFP process. The eight proposals were reviewed and summaries were distributed to the Working Party. In addition, follow-up letters were sent to all except Stanford University. (In its response, Stanford University suggested that the Subcommittee narrow its key criteria in order to facilitate a more manageable study. In addition, Stanford noted if the Committee decided to further refine its criteria, it was interested in submitting a detailed proposal.)

Of these eight respondent vendors, four firms were invited to meet with the working group to further discuss their proposals: The David Sarnoff Research Center (PS/WP7-0056); Marketing Opinion Research (PS/WP7-0058); AHF Marketing Research (PS/WP7-0045); and Eric Marder Associates, Inc. (PS/WP7-0052). All except Eric Marder Associates responded affirmatively and the meeting was held in New York City on Friday, November 10, 1989.

Evaluation of Proposals

Based on the written proposals, and follow-up oral discussions as well, it is evident there are a number of different research approaches that can be undertaken. Each approach contains fundamental differences -- each approach has a number of advantages and disadvantages associated with it.

First, there are differing views as to the required scope of the research. Some feel nationwide sampling is not necessary either from a scientific research or economic standpoint. Their feeling is that the types of variables being tested are not likely to vary significantly by region. Instead, they believe "level of income" is more relevant, in addition to other basic demographic characteristics such as age, sex, race and viewing habits and experience. Others have proposed a nationwide survey incorporating multiple markets in their proposed testing procedures. The working group defers a recommendation on this point until more information is reviewed.

Second, two different research approaches have been suggested: a single stimulus versus a dual stimulus side-by-side test. In the first situation, the uncued respondents in each cell of the design would be asked to rate stimulus material and the system which they viewed independently. In the second situation, respondents would make side-by-side comparisons and indicate their preference.

The problem in the first situation is that there may be limited variation in the range of responses. Dual stimulus testing will provide a comparative value of the various combinations of key variables, but will not provide independent judgments. In order to maximize the information obtained, the funding group may wish to incorporate both types of testing. This may, however, increase the total cost of the research program.

Third, survey participants can be selected and screened either through (i) a distinct resource such as through telephone directories or (ii) "intercept" techniques whereby potential survey participants are stopped at a location such as a shopping mall or convention, screened and then interviewed. The working group believes a better cross-section of demographic quotas and guaranteed participation by survey respondents are more likely to be achieved using the first method described above.

Timetable & Costs

The proposals received varied widely both in terms of timetable and costs. Estimated costs ranged from a low of approximately \$50,000 for a study that would take approximately two months from start to finish, to

\$6-7 million annually, for a study extending over a three-year period. The median proposed cost is \$178,000. However, both estimated costs and timetables will be refined by vendors in accordance with the two-phased approach and refined criteria.

Next Steps

A letter was sent in November to the three vendors that participated in the follow-up discussion with members of the working group and to the vendor who had suggested the scope of the research be narrowed and stated it would then file a more detailed proposal. The letter asked them to amend their proposals in accordance with the two-stage research program and refined key variables.

In addition, vendors have been asked to segregate their pricing proposals by phases, and were asked to provide a quotation for the addition of key variables, if requested to do so. For example, in the event adequate equipment and programming material become available for testing the 1050 system, that system will be moved forward to Phase I of the research program. The letter requested that revised proposals be submitted in time for summary and inclusion in the WP7 report.

RFP-4 – ADVANCED TELEVISION STUDY

Summary of RFP-4 (Advanced TV Study)

| | |
|-------------------------|--|
| Vendors: | Six vendors submitted proposals for this study, four of these have the greatest promise for achieving WP7 goals. |
| Costs: | The current proposals range from \$40,000 to \$200,000. This price would be adjusted if the design is changed. |
| Timeline: | As specified, current proposals range from 32-52 weeks in length. |
| Recommendations: | Adopted recommended three phase approach, revise approaches proposed by four vendors. |

Summary

This represents a preliminary assessment of the responses to RFP-4. RFP-4 was unique. Unlike the relatively well-defined issues of aspect ratio and interlaced scanning, the character of multiscreen displays, interactivity and hard copy interfaces is not well understood. We simply were not advanced enough in our thinking to craft a tightly reasoned RFP. We have learned a great deal from the response of vendors to the original RFP. If we are to proceed expeditiously, WP7 prefers that work in this area be divided into three stages. This could be done through continued negotiation between the funding agency and the current list of interested vendors. Alternatively, a new RFP could be issued with tighter specifications.

Review of Vendor Responses

Six proposals were received in response to RFP-4. Of these, four vendors have proposals which are most promising in terms of accomplishing WP7's research goals (in alphabetical order): Marketing Metrics (PS/WP7-0060); Market Opinion Research (PS/WP7-0059); Meller Group (PS/WP7-0050) and Michigan State University (PS/WP7-0049).

Revisions to Research Approach

The trouble with RFP-4 is that there are too many variables, more than can be meaningfully addressed by a single experimental design. Since developing prototype hardware is difficult and expensive, we need a preliminary focus group or in-depth interview study to winnow down the analysis to a few of the most promising variables. It is hard for people to imagine how advanced systems would work and what they would look like, so we need a stimulus to focus the attention of study participants.

The recurring suggestion in the vendor proposals is to create a videotape illustrating advanced systems and how they would be used. This strikes us as an excellent idea. The production of such a videotape would need to be commissioned prior to any research efforts. Some of the material may be gleaned from existing sources.

Three Phase Approach

To accomplish WP7's revised goals in RFP-4, we recommend a three phase approach be adopted. A specific project would be accomplished in each phase. The creation of the stimulus videotape would comprise Phase I. Phase II would be a series of focus group interviews around the country to assess which aspects of what was illustrated in the videotape are perceived to be a value to consumers. Phase III would take the results of these initial analyses and develop a hands-on experiment and quantitative evaluation of the initial findings.

An estimate of the costs for these revised research goals is as follows:

Summary of Proposed Costs for Revised RFP-4 (Advanced TV Study)

| | |
|--|------------------|
| Phase I: Creation of Stimulus Tape | \$50,000 |
| Phase II: Focus Groups on Stimulus Tape | \$40,000 |
| Phase III: Experimental/Hands-On Study | \$150,000 |
| TOTAL | \$240,000 |

Our sense is that the efforts of WP7 will best be served by a thoughtful refinement and expansion of the original RFP through further discussion of the research with the existing vendors and recruitment of further expertise in the creation and analysis of videotaped and prototype stimulus materials.

NEXT STEPS FOR WP7

There are two remaining tasks for WP7 to accomplish before it can undertake any research. First, we are obliged to pursue funding opportunities to underwrite the research program we have developed. Second, we need to discharge our responsibility with respect to a letter box study. Let's address these issues in turn.

Financial Plan

The members of Working Party 7 have a strong commitment to the recommended research program. We feel this research will represent an important component of informed decision-making regarding the standard setting process for a technology that will depend upon acceptance in the mass consumer market for its success. Understandably, the relatively large expense of high quality audience research is bound to attract some notice among those who are struggling to build the necessary funding for other critical components of this process.

Based on advice from Advisory Committee Chairman, Richard Wiley, and FCC staff liaison, David Siddall, Working Party 7 can undertake its own activities to solicit funds on behalf of the FCC to support the research program. These activities must follow strict guidelines.² WP7 will undertake the development of a financial plan pursuant to these guidelines in its third period of work.

² See FCC Directive (FCCINST 1126.1), Effective Date of May 10, 1988, regarding Federal Advisory Committees seeking private funding (pp. 10-11).

Letter Box Study

WP7 was also asked to consider undertaking a study of consumer reactions to letter box displays, in conjunction with efforts by the Advanced Television Test Center (ATTC), if possible. Several members of WP7 also serve on ATTC bodies in various capacities, either on the board or on the ATTC Consumer Research Committee, so there is excellent coordination between these two groups. WP7 has decided to postpone any activities independent of the ATTC's letter box research until we learn more about their direction and progress. We will continue to coordinate with the ATTC in our third period of work.

CONCLUSION

Working Party 7 has endeavored to create a very careful, thoughtful research plan which is as cost-effective as possible while likely to yield high quality results which are relevant and applicable to the FCC Advisory Committee's charge of selecting an advanced television system standard. Such research is expensive, time-consuming and extremely complicated. However, the bottom line is that any standard selection process is only as successful as the ultimate consumers make it. By making the investment now to understand what the consumer market will look like later, we feel strongly, that a more appropriate standards decision can be made.

We recommend that FCC Advisory Committee accept our Second Report and endorse our research program. Working Party 7 will need to draw upon the expertise and influence of the Advisory Committee in any further attempts to raise the necessary resources to complete the research program described in this report. We look forward to receiving that support and continuing our work.

APPENDIX A – Minutes of WP7 Meetings

SUMMARY OF PS/WP7 MEETING - JUNE 28, 1989

**Home Box Office, Inc.
13th Floor Conference Room
1100 Avenue of the Americas
New York, NY**

PRESENT: Rick Ducey, Rich Feldman, Jim Gasper, Karen Edlitz, David Gump, Lynn Hollister, Bruce Huber, Frank Jazzo, Barbara Lee, Guy Lomatti, Ken Mano, Bob Maxwell, Ruth Morrison, Shawn O'Donnell, Karen Pitts, Kirsten Roth, Leslie Tunstall, Wes Vivian.

I. AGENDA

- A. Summary of Mr. Fishery's steering committee meeting held on May 17, 1989 (the chairman of the Planning Subcommittee working parties and advisory groups provided updates and received further direction from Mr. Fishery - see attached document number PS-032/May 18, 1989 for a description of WP7's new charge).**
- B. Discussion/revision of WP7 report to Planning Subcommittee (dated March 1989)**
- C. Complete the detailed planning of the proposed audience research program and the estimate of the costs involved. This will probably involve setting up specialist groups to handle details regarding (1) ATV programming; (2) ATV equipment; (3) research methods.**
- D. Consider and define a first test to determine the acceptability of the use of a letter box display as compared to a normal full screen display, and prepare a cost estimate of such a test.**
- E. Other business.**
- F. Next meeting.**
- G. Adjournment.**

II. DISCUSSION/ACTIONS

The meeting was called to order by Rick Ducey at 1:06 p.m.

- A. Rick Ducey provided a brief overview of the Planning Subcommittee steering committee meeting held on May 17, 1989 at CBS. Mr. Fishery called this meeting to discuss further work assignments for the various working parties and advisory groups. Working Party 7 was asked to do two things: (1) complete the detailed planning of the proposed audience research program and the estimate of the costs involved; and (2) consider and define a first test to determine the acceptability of the use of a letterbox display as compared with the normal full screen display, and prepare a cost estimate of such a test.**

The consensus of the group was to accept this assignment as stated by Mr. Fishery.

- B. Howard Miller explained that the reason a letterbox study is important is that more than half of the proposed ATV systems rely on a letterbox effect to achieve backward compatibility with existing NTSC receivers. There are a number of good technical reasons for relying on letterboxing to achieve this compatibility. The objective of this research is to assess how viable a letterbox approach is to television audiences in terms of its acceptability.
- C. There was a general discussion of how production values might figure into a letterbox study. Guy Lomatti noted that there would be differences between programming produced to optimize advanced television production values, e.g., taking full advantage of a widescreen capability, and framing for a 4:3 screen shape. Rich Feldman suggested that the test include a 4:3 framing in the test material. Karen Pitts indicated that in her research films were used successfully. Howard Miller questioned how NTSC viewers would react to different angles used for sports productions. Rich Feldman noted that NBC might be willing to produce original widescreen programming for WP7. The issues of framing, camera angles, content (e.g., talking heads versus action) and a number of other production aspects were considered.
- D. Howard Miller suggested that the European and Japanese reactions to letterboxing might be useful to consider as this technique is in widespread use in these locations. He suggested that the European Broadcasting Union (EBU) may have some data on public reaction to letterboxing. Wes Vivian wondered if anybody had any data on commercial impact, for example on ratings or advertising support. He suggested that perhaps the Independent Broadcasting Authority (IBA) in Britain may have such information.
- E. Bruce Huber and Howard Miller described a recent Thomson demonstration which, among other things, showed how a "zoom" function could be incorporated to overscan a letterboxed picture to achieve a vertical fill-in picture and thereby avoid a letterbox effect. This is a relatively cheap component (perhaps \$10) and receiver manufacturers might consider putting in a switch to allow viewers to select between a widescreen/letterbox NTSC display or an overscanned/zoom picture which gives up the sides of a picture to zoom in on a 4:3 framing of a wider aspect ratio picture. In the Thomson demonstration, the film *The Little Emperor* was used in two versions -- a letterbox/videodisc version and a videotape/pan & scan version.
- F. Rich Feldman proposed that the letterbox study include a component whereby community "influentials" or opinion leaders would be studied to assess their reactions to letterboxing. In addition to a marketing dimension, there may be a political dimension to the perception that, "viewers lose something" in a letterbox picture. While viewers would gain a wider aspect ratio but this may not be perceived to be satisfying to some opinion leaders. This study component would be more important if WP7 decides that part of its objective is to assess the full social impact of a potential move toward letterboxing.
- G. Wes Vivian proposed that the group consider more than the three static screen conditions of letterbox, NTSC and widescreen. He indicated that it may be desirable to have a dynamic screen shape which might vary according to thematic content of the program. Howard Miller had described a PBS special earlier which made use of this technique.
- H. Wes Vivian and others indicated that a fair test of systems would specify that productions be optimized for NTSC and widescreen capabilities, not just converting something composed for widescreen to NTSC.
- I. Rick Ducey summarized the group's thinking by suggesting that two studies were being proposed. The first study would be an in-home study with two signals delivered, perhaps over-the-air or by cable.

television. One signal would be letterbox, the other signal would be 4:3. Viewers would be recruited prior to the air date and encouraged to watch one or more full-length programs and compare the two channels. Program segments might include sports, movies, talk shows, situation comedies, game shows, commercials, music videos and shows relying on graphics. Widescreen productions could be panned & scanned to convert to 4:3 or a 4:3 version could be separately shot. It was observed that sports programming in widescreen may be hard to find. Rich Feldman suggested the film *The Longest Yard* might be useful for this purpose.

- J. Karen Pitts argued that a side-by-side comparison would be desirable as well as an in-home test. Howard Miller indicated that from a user perspective (i.e., the entity delivering the programming) the in-home test would be more interesting, however from a proponent's perspective, the side-by-side test would reveal how consumers might react to comparative advantages of different systems. The group concurred that both in-home and side-by-side tests are desirable.
- K. Rick Ducey described three levels of interest with respect to audience reactions to letterboxing: (1) do they recognize it; (2) how do they evaluate it - positively, negatively or are they neutral; and (3) reaction - what would viewers do when they encounter letterbox programming - watch it or tune away? Rich Feldman and others argued that the third point is most important and that a sample would be biased if questions regarding (1) and (2) were asked. Others thought it was important to address all three points even if the use of subsamples was required. Rich Feldman proposed that no decision be made until the procedure could be pilot-tested to determine the extent to which biasing effects exist.
- L. Wes Vivian posited that unless the sample members were given a context their answers would not be relevant. For example, unless the sample understands that under one scenario, after some specified date in the future all of their television programming would be in a letterbox format unless they buy a more expensive ATV set, their answers might not be predictive of their actual behaviors. The group agreed that some form of marketing scenario(s) could profitably be incorporated into the research design. The scenario(s) should be developed to reflect realistic conditions which can be described to sample members who could then be asked to answer "what if" questions about their behaviors under these assumed conditions.
- M. Wes Vivian also suggested that since most scenarios involve fairly large ATV equipment within the household, the consumer reaction to a ceiling-mounted projector should be considered. Consumers may have entirely different reactions to ATV equipment if the display unit can be mounted out of the way on the ceiling.
- N. Rick Ducey reviewed the request-for-proposals (RFP) to be issued by the Advanced Television Test Center for a letterbox study. He said he would incorporate the proposed modifications developed by WP7 and see if these are acceptable to the Test Center. Howard Miller stated that a major purpose for creating the Test Center was to assist the FCC ATV planning process and so he thinks the Test Center would want to work in coordination with WP7. Rich Feldman agreed. Rick Ducey indicated that most of the members of the ATTC Consumer Research Committee are also active in WP7 so there is a high probability that what WP7 agrees on will also be agreed to by ATTC.
- O. Having completed extensive discussion on the letterbox study, Rick Ducey directed the group's attention to the other element of Mr. Fisherty's request to the group - that further planning be advanced regarding research details, timing and cost for the original research program proposed by WP7. Leslie Tunstall said it is difficult to do this without working directly with vendors. Rick Ducey proposed that the group

coordinators therefore fashion their groups' research plans into RFP form which could then be issued for bid. Working with research companies submitting bids, the final research details could then be worked out in a more realistic fashion. Wes Vivian volunteered to head up the "in-depth study" which had been head by Mr. Yozo Ono from NHK, since he was not in attendance. Shawn O'Donnell volunteered to head up the "advanced television study" which had been developed by Russ Neuman, since he also could not make this meeting. Leslie Tunstall will also work with Shawn and Russ on this project.

Rick Ducey asked that the four groups present their documents written up as RFPs to him by Friday, July 21, 1989. He will then distribute them to WP7 for comment. At Rich Feldman's suggestion, these RFPs will not be issued until the letterbox study RFP process is completed.

- P. Karen Pitts expressed concern that WP7 coordinate with WP3 in terms of research questions. She indicated that different display shapes could be compared varying equal height, width or area and that WP7 and WP3 may be pursuing different agendas.
- Q. The next meeting was set to be held at NAB on August 23, 1989 from 1-4 p.m.

The meeting was adjourned at 4:04 p.m.

III. IMPLEMENTATION

- A. RFPs will be prepared under the direction of the group coordinators for the original four studies proposed by WP7. The studies and group coordinators are:
 - 1. TV STORE STUDY: Rich Feldman, NBC
 - 2. TECHNICAL STUDY: Karen Pitts, David Sarnoff Research Center
 - 3. IN-DEPTH STUDY: Wes Vivian, University of Michigan
 - 4. ADVANCED TV STUDY: Shawn O'Donnell, M.I.T.

These RFPs are due to Rick Ducey by Friday, July 21, 1989 at 5 pm.

- B. Rick Ducey will distribute the four RFPs to WP7 participants the week of July 24, 1989.
- C. Howard Miller and Leslie Tunstall will seek information from the European Broadcasting Union (EBU) regarding public reaction to letterboxing. Rich Feldman volunteered to check with a contact he has at the BBC. Howard Miller also said he would check with colleagues at NHK for similar information.
- D. Karen Pitts will contact WP3 to determine their interest in investigating reactions to different display area possibilities including equal height, equal width, equal diagonal options as this relates to the work of WP7. She will report back to WP7.
- E. Rick Ducey will keep WP7 apprised of ATTC activities, particularly with respect to the letterbox study RFP.

F. The next meeting will be held:

Wednesday, August 23, 1989
1:00 p.m. to 4:00 p.m.
VTW Room (1st Floor)
National Association of Broadcasters
1771 N Street, N.W.
Washington, D.C. 20036

contact: Molly Fink (202) 429-5389

SUMMARY OF PS/WP7 MEETING -- AUGUST 23, 1989

**National Association of Broadcasters
VTW Room
1771 N Street, N.W.
Washington, D.C. 20036**

PRESENT: Dan Conley, Andre De Verneil, Rick Ducey, Ken Dunmore, Rich Feldman, David Gump, Jeanne Chirop (for George Hanover) Bruce Huber, John Huffman, Frank Jazzo, Guy Lometti, Ruth Morrison, Russ Neuman, Karen Pitts, Jayne Roads, Kirsten Roth, Wes Vivian.

I. AGENDA

- A. NBC Widescreen Research -- Rich Feldman**
- B. Review of Draft Requests for Proposals (RFPs)**
 - 1. RFP-1: TV Store Study -- Rich Feldman**
 - 2. RFP-2: Technical Study -- Karen Pitts**
 - 3. RFP-3: In-Depth Study -- Wes Vivian**
 - 4. RFP-4: Advanced TV Study -- Russ Neuman**
- C. ATTC Letterbox RFP -- Rick Ducey**
- D. Other Business**
- E. Next Meeting**
- F. Adjournment**

II. DISCUSSION/ACTIONS

The meeting was called to order at 1:15 p.m.

- A. Rich Feldman updated WP7 on some recent research conducted by NBC with respect to widescreen television. Mr. Feldman submitted a summary of this research into the WP7 record (PS/WP7-0036) and offered the raw data (in spreadsheet format) to those interested. The results were based on responses from 145 adults who in groups of 2-17 were shown standard NTSC and widescreen television on sets of equal height, brightness and color imagery. After seeing a three minute clip from the movie *Hoosiers* and a three minute segment of panoramic scenes, 77% said they would rather buy widescreen than current television sets, if price were no issue. One third of these people would even be willing to pay a 50% premium to have a wider screen, according to the report.**

- B. A discussion of funding for the WP7 research program was held. Mr. Ducey indicated that there are no public funds (e.g., from the FCC) now targeted for this research program, although there is substantial interest within the private sector for supporting some aspects of the research plan. For example, the Advanced Television Test Center has expressed interest in RFP-1, the "TV Store Study." Mr. Neuman suggested that WP7 seek to secure funding for the research program from other sources, such as private foundations. Mr. Ducey responded that he would investigate WP7's legal standing for undertaking this activity.
- C. Mr. Feldman suggested that while the issuance of the four RFPs was a worthwhile undertaking, what would really be required is for WP7 to sit down with research suppliers and work out a detailed research plan together. Mr. Ducey said that he would be sure to invite a number of research suppliers to attend the next meeting of WP7. He asked for specific suggestions of which companies or individuals to invite.
- D. Mr. Neuman urged that in issuing the RFPs a sense of excitement and importance be communicated for this research program may be critical in the decision-making process for selecting an advanced television system standard in the U.S.
- E. It was pointed out that the NBC widescreen research used an "equal height" approach. Advisory Group 1 of the Planning Subcommittee (PS/AG-1) has identified aspect ratio as a creative issue. Therefore, any work undertaken by WP7 with respect to aspect ratio should be coordinated with AG-1. Mr. Ducey reported that the creative community was supporting legislation to secure "moral rights/material alterations" protection which would also address the aspect ratio question of advanced television systems.
- F. The four RFPs were then thoroughly discussed. The resulting documents are attached in their final form, as issued to the research community. A list of research suppliers to which the RFPs were sent is also attached.
- G. Mr. Neuman emphasized that in positioning the four RFPs, it should be made clear that WP7 recommends that each study be conducted, and that the studies are each of the same high priority.
- H. The next meeting will be held at Wednesday, October 18th at NAB Headquarters, McCollough Room, 1771 N Street, N.W., from 1:00 to 4:00 p.m. Contact Molly Fink at (202) 429-5389 for further information.

The meeting was adjourned at 3:58 p.m.

III. IMPLEMENTATION

- A. Final edits will be made to the four RFPs (RFP-1, Feldman; RFP-2, Pitts; RFP-3, Vivian; RFP-4, Neuman) and returned to Mr. Ducey, as soon as possible. He will then coordinate the development and issuance of the RFP package to the research community. WP7

members are invited to submit research vendors to receive the RFP package. Mr. Ducey will invite these research suppliers to attend the next WP7 meeting to discuss the details of the research plan.

- B. Mr. Ducey will determine WP7's legal standing for undertaking fundraising (and collection) for the purpose of commissioning the research plan developed by the group.**

ADVISORY COMMITTEE ON ADVANCED TELEVISION SERVICE

Planning Subcommittee

Working Party 7 (Audience Research)

MINUTES OF OCTOBER 18, 1989 MEETING

**McCollough Room
NAB Headquarters, Washington, DC**

PRESENT: Art Allison, Tom Bentsen, Doug Cerrone, Irving Crespi, Andre De Verneil, Rick Ducey, Rich Feldman, Tom Friel, Jim Fletcher, John Fuller, Jim Gaspar, David Gump, Michael Hess, Frank Jazzo, Warren Johnson, Jeffrey Kraus, Barbara Lee, Guy Lometti, Ken Mano, Paul Marrangoni, Howard Miller, Harvey Morrow, Russ Neuman, Dale Pellman (for Richard James), Karen Pitts, Bill Pohto, John Polich, Ira Potashner, Frank Reed, Byron Reeves, Mindy Rhindress, Irv Rosner, Maitlon Russell, Steve Sigman (for Bruce Huber), Jim Spaeth, Tibor Weiss

I. AGENDA

- A. Summary of Planning Subcommittee Meeting on September 19th -- Ducey**
- B. ATTC Letterbox Study Update -- Ducey and Miller**
- C. WP7 RFPs Discussion**
- D. 2nd WP7 Report to Planning Subcommittee -- Ducey**
- E. Other Business**
- F. Next Meeting**

II. DISCUSSION/ACTIONS

The meeting was called to order at 1:08 p.m.

- A. Mr. Ducey reported on the last meeting of the Planning Subcommittee which was held on September 19th at the FCC. WP7's work statement was described: (1) the completion of detailed planning of the proposed audience research program and the estimate of the costs involved; and (2) consider and define a first test to determining the acceptability of the use of a letter box display as compared with the normal full screen display, and prepare a cost estimate and schedule for such a test -- this should be coordinated with ATTC and the Cable Labs. Mr. Flaherty called for WP7's second report to be drafted by mid-November. Mr. Flaherty**

asked that WP7 make an official response to ATTC's work on a letter box study, vis a vis WP7's assignment in this area.

- B. At the last WP7 meeting (August 23rd), Mr. Ducey said he would investigate the possibility of WP7 seeking funds to commission the audience research program it was developing. Mr. Ducey investigated the procedures with several Advisory Committee officials and determined that WP7 could undertake the process of raising funds but a number of conditions must be met. He will pursue the necessary activities to meet these conditions where possible.
- C. Mr. Tom Bentsen, Manager of Advanced Video Systems Development at NASA, submitted a letter to WP7 (PS/WP7-0061) commenting on the desirability of considering the Lechner distance between the NTSC monitor and the viewer to provide maximum benefit of the display characteristics and minimum exposure to the deteriorating effects of transmission and line structure in side by side (HDTV versus NTSC) comparisons. Mr. Bentsen asked that his figure on page 2 of the letter be corrected to read: **RESULT: The HDTV monitor appears 267% larger** (originally, the letter specified "400% larger"). Mr. Bentsen based his correction on work done by CBS to which he deferred. His conclusion is that side by side comparisons may be desirable but that the monitors do not belong on the same plane. WP7 discussed the merits of this argument and concluded that both Lechner and other distances from the screens could be measured, as suggested by Russ Neuman.
- D. Mr. Ducey referred to the proposals received from 12 research companies in answer to WP7's four RFPs. A total of 21 proposals were received addressing the four study areas. Representatives from a number of the research companies were in attendance at the meeting. Due to an apparent misunderstanding about the public nature of the WP7 RFP process, Mr. Ducey offered that any company not wishing its proposal(s) to be in the public domain should feel free to withdraw any submission from the public record of the working party's activities. The research companies representatives in attendance preferred to leave their documents in the public record.
- E. A process for considering the research proposals submitted to WP7 was established. The research vendors expressed great concern about a procedure which would have vendors evaluating competitors in a selection process. Mr. Miller proposed that vendors make presentations one by one, if requested by WP7, and then a selection would occur without vendors participating in the evaluation process. This procedure was adopted.
- F. The group concluded that given the low volume of response to RFP-3, the "In-Depth Viewing Study," that it was best at this time to put that study on hold. As a result, further discussions focused only on the three remaining RFPs, 1, 2 and 4. The problem seems to be that there is insufficient programming available with which to conduct the study at this point in time.

- G. Mr. Ducey asked that three subcommittees be formed to handle the evaluation of the proposals submitted in response to these RFPs. Mr. Feldman (RFP-1/TV Store Study), Mr. Miller (RFP-2/Technical Study) and Dr. Neuman (RFP-4/Advanced TV Study) accepted assignments as subcommittee chairs.**
- H. Mr. Ducey asked that the subcommittees meet and establish evaluation procedures. At a minimum, it should be concluded which studies adequately addressed WP7's concerns and which did not. A full specification of the range of costs, timelines, equipment and programming requirements should be achieved. If desired, any proposal already submitted can be modified by the research company submitting the proposal. WP7 will not cherry-pick the proposals but consider each proposal in its entirety. This last condition was added to acknowledge the concerns of the research companies seeking to protect the uniqueness of their proposals. The subcommittee chairs were asked to draft reports by the time of the next WP7 meeting.**
- I. Mr. Ducey asked for WP7's input on the ATTC letter box study. There was some concern that the \$30,000, which Peter Fannon announced at the September 19th Planning Subcommittee meeting the ATTC had allocated for this purpose, was insufficient to support quality research. Mr. Miller acknowledged that the ATTC felt an urgent need to proceed with the work and drew upon WP7's input. The group acknowledged that ATTC was proceeding acceptably with its plans to conduct a study of audience reactions to letter box programming so there was no need for WP7 to duplicate the ATTC's efforts.**
- J. The next meeting of WP7 was set for Thursday, November 30th from 10:00 a.m. to 12 noon at NBC, 30 Rockefeller Plaza, New York, NY. The meeting will be held in Mezzanine A, use the "studio entrance." Please RSVP so we can inform the security guards of your planned attendance.**

The meeting was adjourned at 3:35 p.m.

ADVISORY COMMITTEE ON ADVANCED TELEVISION SERVICE

Planning Subcommittee

Working Party 7 (Audience Research)

SUMMARY OF NOVEMBER 30, 1989 MEETING

**National Broadcasting Company
Mezzanine A (Studio Entrance)
30 Rockefeller Plaza
New York, NY
10:00 a.m. - 12:00 p.m.**

PRESENT: Dan Conley, Virgil Conanan, Rick Ducey, Rich Feldman, Jim Gaspar, Lynn Hollister, Frank Jazzo, Jeffrey Kraus, Barbara Lee, Guy Lometti, Robert McFarlane, Evans Nord (for Warren Johnson), Karen Pitts, John Polich, Irv Rosner, Steve Sigman (for Bruce Huber), Sam Tuchman, Leslie Tunstall, John Watson, Gwen Woods (for Howard Miller).

I. AGENDA

A. Approval of minutes from October 18th meeting.

B. ATTC Letterbox Study Update. Mr. Ducey

C. Subcommittee Reports

- 1. RFP 1 (TV Store Study) -- Mr. Feldman**
- 2. RFP 2 (Technical Study) -- Mr. Miller**
- 3. RFP 4 (Advanced TV Study) -- Dr. Neuman**

D. Research Support -- Mr. Ducey

- 1. Equipment**
- 2. Programming**
- 3. Financial**

E. WP7 Report to Planning Subcommittee -- Mr. Ducey

II. DISCUSSION/ACTION

The meeting was called to order at 10:06 a.m.

- A. Mr. Ducey announced that Mr. Robert Maxwell had resigned his position as WP7 Vice Chairman. A replacement will be selected.**
- B. Mr. Ducey provided an update of the Advanced Television Test Center's activities with respect to its interest in conducting a study of consumer reactions to letterbox**

displays. The ATTC issued an RFP to receive proposals for conducting the research. A number of researchers submitted proposals. The ATTC Consumer Research Committee, chaired by John Abel (NAB), includes Rick Ducey, Rich Feldman and Guy Lometti from WP7. In addition, WP7 Vice Chair Howard Miller is on the ATTC Board, so there is a lot of representation and coordination between ATTC and WP7. The ATTC is finalizing details with respect to this research. As soon as details are available for release, Mr. Ducey will share this information with WP7. This project is on a fairly quick track, there is a desire to complete the study as soon as possible.

- C. With respect to the ATTC work on letterbox displays, several WP7 members raised areas of interest. Questions regarding the nature of the letterbox display were raised. For example, would study participants be exposed to pan and scan source material; what would the borders look like (e.g., would there be data bursts, etc.); what amount of overscan would there be; what types of content would be tested; would the study take place in-home or in another setting. Since the research project was still being negotiated, there were no firm answers at this time. Mr. Ducey suggested that any WP7 member wishing to have input in the ATTC decisionmaking process should either contact the ATTC Board, Peter Fannon, ATTC Executive Director, or one of the WP7 members who serve as representatives to ATTC in one capacity or another.
- D. Mr. Feldman described progress on the research proposals received for RFP-1 (TV Store Study). He thanked Steve Sigman from Zenith for his first draft summary of the eight proposals received. Proposals from three were judged to be adequate to serve WP7's interests, although each of the proposed research designs require further development. The research costs ranged from \$105,000 to \$400,000. These costs assume some additional support with equipment and programming. Mr. Feldman said that when the new digital recorders are shipped, this might free up a set of analog recorders to be used in this research.
- E. Ms. Woods covered the report on RFP-2 (Technical Study) for Mr. Miller who was unable to be present. Eight vendors offered proposals for consideration. Ms. Woods noted that the RFP requested attention to a large number of variables and that one research strategy was to narrow the scope of investigation. It appeared unlikely that any one vendor would be able to adequately address all variable of concern. After substantial deliberation, the group decided to recommend a two-phase approach to this research. Phase I would focus primarily on currently available technology (i.e., NTSC vs. 1125, aspect ratio, pricing info, etc.). Phase II would then address areas such as interlaced versus progressive scan, scan rates (525, 787.5, 1050), transmission degradation, etc. There was some discussion about whether Phases I and II would adequately address interactions among variables and the extent to which Phase I would cover different ground than the TV Store Study envisioned in RFP-1. WP7 members decided to accept the

subcommittee's suggestion for two phases, stressing that Phase I should be made as distinct from the TV Store Study as possible.

- F. In Dr. Neuman's absence, Mr. Feldman conveyed the report of the RFP-4 subcommittee. Dr. Neuman's basic conclusion was that the efforts of WP7 will best be served by a thoughtful refinement and expansion of the original RFP through further discussion of the research with the existing vendors and recruitment of further expertise in the creation and analysis of videotaped and prototype stimulus materials.
- G. Mr. Ducey reported that WP7 could pursue opportunities with respect to raising financial support for the recommended research program but a specific procedure had to be followed. He will initiate action in this regard. He noted that Drs. Neuman and Vivian had expressed interest in this area and he will call upon them for further input. WP7 will be kept informed of progress.
- H. Mr. Ducey indicated that he will draft the Second Report of WP7 for Mr. Flaherty as soon as possible and share this draft with WP7 for comment.
- I. The next meeting will be called as needed pending further developments on funding or additional requests from Mr. Flaherty.
- J. The meeting was adjourned at 11:46 a.m.

WP7 (AUDIENCE RESEARCH) SECOND REPORT
February 1990

APPENDIX B – WP7 Documents List

Working Party 7: Audience Research

February 8, 1990

Documents -- Master List

| PS/WP7 # | Date | Author/Firm | Title |
|----------|-----------|------------------------|---|
| 0001 | 15 Dec 88 | Joe Flaherty, CBS | Letter forming WP7 (2 pp) |
| 0002 | 23 Dec 88 | Rick Ducey, NAB | Letter inviting interested parties to WP7 meetings (9 pp) |
| 0003 | 04 Jan 89 | Irwin Dorros, Bellcore | Letter: Comments on ATV programming and viewer control (2 pp) (xref SS-0089/04 Jan 89) |
| 0004 | 09 Jan 89 | L.J. Thorpe, Sony | HDTV Image Presentation to Consumer Audiences (13 pp) |
| 0005 | 27 Dec 88 | Richard Feldman, NBC | Proposal for Consumer Research (3 pp) |
| 0006 | 28 Dec 88 | Robert Maxwell, HBO | Consumer Response to HDTV (38 pp) |
| 0007 | 28 Dec 88 | Cmte. for NA HDTV Demo | North American HDTV Demo to the Public (17 pp) |
| 0008 | 10 Jan 89 | W. Russell Neuman, MIT | Mass Audience Looks at HDTV: An Early Experiment (13 pp) |
| 0009 | 11 Jan 89 | Greg DePriest, MST | Response to Rich Feldman's Proposal (PS/WP7-0005) (3 pp) |
| 0010 | 11 Jan 89 | WP-7 | Scope and Work Statement (as revised from PS/WP7-0001) (1 p) |
| 0011 | 11 Jan 89 | Bruce Huber, Zenith | Research Proposal (3 pp) |
| 0012 | 11 Jan 89 | W. Russell Neuman, MIT | Research Proposal (Audience Demand for HDTV) (6 pp) |
| 0013 | 11 Jan 89 | PS/WP6 | Final Report, Section III ("Subjective Test Methods: Social Science") (13 pp) |
| 0014 | 24 Jan 89 | Cmte. for NA HDTV Demo | Detailed Survey Results/Nov 1988 (120 pp) |
| 0015 | 24 Jan 89 | Howard Miller, PBS | ATTC Approach to Audience Research (3 pp) |
| 0016 | 25 Jan 89 | Russ Neuman, MIT | Key Issues for WP-7 (2 pp) |